

- 27.(amended) A method for treating a condition that includes phosphorylation of proteins by a kinase, comprising,
administering to a subject an amount of the kinase binding molecule of claim 21 effective to inhibit the phosphorylation of the proteins by the kinase.
- 30.(amended) A kinase inhibitor comprising a binding motif for a phosphorylation site of a kinase identified according to claim 1, wherein the single non-degenerate phosphorylatable amino acid is replaced by an amino acid that cannot be phosphorylated by the kinase to which the inhibitor binds.
- 36.(amended) A composition comprising the kinase inhibitor of claim 30 and a pharmaceutically acceptable carrier.
- 38.(amended) A method for inhibiting phosphorylation of proteins by a kinase, comprising,
contacting the kinase with an amount of the kinase inhibitor of claim 30 effective to inhibit the phosphorylation.
- 39.(amended) A method for treating a condition that includes phosphorylation of proteins by a kinase, comprising,
administering to a subject an amount of the kinase inhibitor of claim 30 effective to inhibit the phosphorylation of the proteins by the kinase.
- 42.(amended) A method for validating a kinase as a target for inhibition for the treatment of a condition, comprising
providing a molecule comprising a binding motif for a phosphorylation site of a kinase as claimed in claim 1,
contacting a biological sample containing a kinase suspected of being involved in the causation of the condition with the molecule for a time sufficient to permit binding of the molecule and the kinase, and
determining the effect of the molecule on one or more biological processes mediated by the kinase.

46.(amended) A method for inhibiting a ZAP-70 kinase comprising,
contacting the ZAP-70 kinase with an amount of a kinase inhibitor as claimed in claim
30, effective to inhibit the ZAP-70 kinase.

48.(amended) A method for treating a condition mediated by a ZAP-70 kinase
comprising
administering to a subject in need of such treatment an amount of a kinase inhibitor as
claimed in claim 30, effective to inhibit the ZAP-70 kinase.

52.(amended) A method for inhibiting transcription mediated by a ZAP-70-responsive
promoter sequence, comprising
contacting a biological sample, cell or organism that comprises a ZAP-70-responsive
promoter sequence operably linked to a nucleic acid molecule with an amount of a kinase
inhibitor as claimed in claim 30 effective to inhibit the transcription of the nucleic acid molecule
mediated by the ZAP-70-responsive promoter sequence.

55.(amended) A method for treating a condition mediated by transcription mediated by a
ZAP-70-responsive promoter sequence, comprising
administering to a subject in need of such treatment an amount of a kinase inhibitor as
claimed in claim 30, effective to inhibit the transcription mediated by the ZAP-70-responsive
promoter sequence.

60.(amended) A method for identifying a kinase inhibitor compound, comprising
providing a kinase, a kinase inhibitor that binds the kinase, and a candidate kinase
inhibitor compound,
contacting the kinase with the candidate kinase inhibitor compound and the kinase
inhibitor under conditions that permit binding of the kinase inhibitor to the kinase, wherein either
or both of the candidate kinase inhibitor compound and the kinase inhibitor are detectable, and
wherein either or both of the candidate kinase inhibitor compound and the kinase inhibitor
comprises a sequence determined according to claim 1,

separating the kinase from the unbound kinase inhibitor and unbound candidate kinase
inhibitor compound, and